

Abstract of the Disclosure

The invention provides peptides derived from erythroid Band 3 protein, which selectively bind to merozoite surface protein-1 (MSP-1), and/or one or more of the malaria polypeptides: BBP-1, BBP-2, BBP-3, BBP-4, BBP-5, BBP-6, RhopH3, and ABRA and prevent infection by the parasite of a Band 3-expressing cell, such as an erythrocyte. The invention also provides the isolated polypeptides BBP-1, BBP-2, BBP-3, BBP-4, BBP-5, BBP-6, RhopH3, and/or ABRA as well as peptides derived from MSP-1, which selectively bind to erythroid Band 3 protein and prevent parasite invasion into a Band 3-expressing cell, and prevent *Plasmodium* infection. Methods of using the malaria and MSP1 polypeptides of the invention for malaria prevention and/or treatment (e.g. in vaccines) are also provided. Antibodies that bind to the Band 3 polypeptides and anti-idiotypic antibodies thereto also are provided. Methods for selecting agents which inhibit Band 3-mediated parasite entry into target cells and methods of treatment which involve the polypeptides, antibodies, and anti-idiotypic antibodies also are provided.